

AMENDMENT UNDER 37 C.F.R. § 1.111  
Application Serial No. 10/751,470  
Attorney Docket No. Q79189

### **REMARKS**

Upon entry of the present Amendment, claims 1-8 are all the claims pending in the application. Claims 3-5 are amended, and new claim 8 is added. No new matter is presented.

To summarize the Office Action, claims 1 and 7 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morita (EP 0926675) in view of Del Genio et al. (U.S. Patent No. 6,034,850, hereinafter “Del Genio”) and admitted prior art (“APA”), claim 2 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable both over Morita, Del Genio, APA and Saito (U.S. Patent No. 4,290,567) and over Morita, Del Genio, APA, and Ishihara et al. (U.S. Patent No. 6,663,036, hereinafter “Ishihara”), claim 3 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morita in view of Del Genio, APA, and Martin et al. (U.S. Patent No. 5,868,338, hereinafter “Martin”), claims 4 and 5 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morita in view of Tanaka et al. (U.S. Patent No. 5,180,118, hereinafter “Tanaka”), and claim 6 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morita in view of Tanaka and Martin.

The outstanding grounds of rejection are traversed, as discussed below.

#### **Claim Rejections - 35 U.S.C. § 103**

##### **Morita in view of Del Genio and APA**

As noted above, claims 1 and 7 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morita in view of Del Genio and APA. Applicant respectfully traverses

and submits the rejection of these claims is improper because the Examiner has failed to establish *prima facie* obviousness, as evidenced by the following.

For instance, claim 1 defines a magnetic tape cartridge comprising, *inter alia*, a cartridge case, formed by fastening upper and lower cases of synthetic resin together, and having a tape leader opening formed in upper and lower side walls of the upper and the lower cases; a single tape reel having magnetic tape wound thereon and rotatably housed within the cartridge case; and a tape leader pin, firmly attached to a leading end of the magnetic tape, and detachably held in an upright state between the upper and lower cases so that the tape leader pin faces the tape leader opening. As further recited, the tape leader pin has axially opposite flanges, a length of the tape leader pin is 18.7 mm, and the cartridge case has a thickness of 1.38 mm above and below the axially opposite flanges of the tape leader pin.

As previously discussed, the combination of Morita, Del Genio, and APA does not teach or suggest *at least* the features of the length of the tape leader pin is 18.7 mm *and* the cartridge case has a thickness of 1.38 mm above and below the axially opposite flanges of the tape leader pin, as claimed. As further pointed out, Applicant's specification describes shortening the conventional pin length of 19.46 mm to 18.7 mm as allowing the thickness of the cartridge to be increased due to shorter pin length, such that the thickness is increased to 1.38 mm above and below the axially opposite flanges to thereby enhance the strength of the cartridge case near the tape leader opening. *See* Amendment Under 37 C.F.R. § 1.116, filed March 30, 2006, at pages 6-10. Thus, the length of the tape leader pin and the width of the flange can be set to that the width of the cartridge can be made maximal without changing the mechanism of the drive.

The Examiner concedes that the combined teachings of Morita, Del Genio, and APA, even assuming the asserted motivation to combine is proper, does not teach the above features. However, the Examiner alleges in a conclusory manner that it would have been obvious to modify the tape leader pin length of the conventional cartridge from 19.46 to 18.7 mm and to provide a cartridge thickness of 1.38 mm above and below the axially opposite flanges of the tape leader.

Applicant again submits that the Examiner has impermissibly relied on hindsight construction based on insight gleaned solely from Applicant's disclosure, not the objective teachings of the prior art, as the motivation to modify the dimensions of the conventional tape cartridge. Indeed, the conclusory rationale provided by the Examiner's in the Office Action is premised on wholly unsubstantiated opinion as to the capabilities of an "ordinary artisan". To wit, the Examiner contends that "an ordinary artisan would have been capable of predicting and evaluating the effects of changes in these dimensions on the finished cartridge" and no "new and unexpected results have been shown to particular dimensions claimed." Further, the Examiner asserts that "it would have been known to an ordinary artisan that thickening the walls of the cartridge would increase their strength for any given material and that reducing the thickness of the leader pin flanges would reduce their strength." *See* Office Action at page 8.

In rejecting claim 1, however, the Examiner has failed to present any objective evidence that suggests modifying the conventional tape cartridge thickness and reducing the length of the tape leader pin would have been obvious. Indeed, the Examiner has not even shown that the

conventional cartridge thickness is inadequate, much less that reducing the tape leader pin together with thickening the cartridge would have been obvious.

Deficiencies of cited references cannot be remedied by “general conclusions about what is ‘basic knowledge’ or ‘common sense.’” In re Zurko, 59 U.S.P.Q.2d 1694, 1697 (Fed Cir. 2001); *see also* In re Lee, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002). Further, as explained in M.P.E.P. § 2144.03, “[i]t is never appropriate to rely solely on ‘common knowledge’ in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based.”

In rejections under 35 U.S.C. § 103, the inquiry is “whether a person of ordinary skill in the art, possessed with the understandings and knowledge reflected in the prior art, and motivated by the general problem facing the inventor, would have been led to make the combination recited in the claims.” In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006).

Unsubstantiated speculation is not a substitute for objective evidence of a motivation to modify. Indeed, “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” In re Kahn, 441 F.3d at 987-88 (quoting In re Kotzab, 217 F.3d 1365, 1370 (Fed. Cir. 2000)). The showing of a suggestion or motivation to modify a reference is likewise applicable when only one reference is relied upon. *See* In re Kotzab, 217 F.3d at 1370 (“Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.”).

Further, the USPTO is held to a rigorous standard when trying to show that an invention would have been obvious in view of the combination of two or more references or modification of a single reference. *See In re Lee*, 277 F.3d 1338, 1343 (Fed. Cir. 2002), *citing, e.g., In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”); *see also Alza Corp. v. Mylan Lab., Inc.*, 2006 U.S. App. LEXIS 22616 at \*7 (Fed. Cir. 2006) (“At its core, our anti-hindsight jurisprudence is a test that rests on the unremarkable premise that legal determinations of obviousness, as with such determinations generally, should be based on evidence rather than mere speculation or conjecture.”).

The case law emphasizes that the “need for specificity pervades this authority.” *In re Lee* 277 F.3d at 1433 (*citing In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed”). In the present case, however, no such specific findings have been made with regards to the admitted deficiencies of the applied art, and there is no objective evidence of a motivation to modify the dimensions of the conventional tape cartridge other than Applicant’s own disclosure, which evinces the impermissible hindsight reconstruction upon which the rejection of claim 1 is speciously founded. Simply stated, the speculative “design choice” rationale presented by the Examiner is devoid of any evidence of a motivation, teaching, or suggestion to modify other than knowledge gleaned from Applicant’s specification itself.

Accordingly, the rejection of claim 1 is improper because the combination of Morita in view of Del Genio and APA fails to teach or suggest all the claim features and the rejection is improperly based on impermissible hindsight reconstruction. Reconsideration and withdrawal of the rejection of claim 1 is therefore requested.

With respect to claims 2-3 and 7, Applicant submits that these claims are allowable at least by virtue of their dependency and by virtue of the features recited therein.

Morita in view of Del Genio, APA, and Martin

Claim 3 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morita in view of Del Genio, APA, and Martin. In addition to being allowable by virtue of its dependency, Applicant submits that claim 3 is further allowable because the combination of Morita in view of Del Genio, APA, and Martin fails to teach or suggest at least the feature of the U-shaped clip includes a connecting plate portion and a pair of leg portions bent at right angles in the same direction at both ends of the connecting plate portion such that the pair of leg portions are respectively inserted into the upper and lower sidewalls *perpendicular to the tape leader pin* detachably held in the upright state, as claimed

For instance, Martin, which is alleged by the Examiner to teach a U-shaped clip, simply teaches a *flat* projection insert 118 placed between base 38 and cover 40. *See* Martin at Figure 8 and col. 7, lines 8-25. Thus, the projection insert of Martin does not suggest a U-shaped clip having a pair of leg portions are respectively inserted into upper and lower sidewalls *perpendicular* to the tape leader pin detachably held in the upright state, as claimed. Thus, as

the combination of Morita in view of Del Genio, APA, and Martin does not suggest all the features of claim 3, reconsideration and withdrawal of the rejection is requested.

Morita in view of Tanaka

Claims 4 and 5 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Morita in view of Tanaka. Applicant respectfully traverses and submits that the combination of features recited by these claims would not have been obvious in view of the teachings of Morita and Tanaka.

For instance, claim 4 defines a magnetic tape cartridge comprising, *inter alia*, a cartridge case, formed by fastening upper and lower cases of synthetic resin together, and having a tape leader opening formed in upper and lower side walls of said upper and said lower cases; a single tape reel having magnetic tape wound thereon and rotatably housed within the cartridge case; and a tape leader pin, firmly attached to a leading end of the magnetic tape, and detachably held in an upright state between the upper and lower cases so that the tape leader pin faces the tape leader opening. As further defined, metal reinforcement members are embedded in the upper and lower cases, respectively, near the tape leader opening, in which a first metal reinforcement member is provided above the tape leader pin and a second metal reinforcement member is provided below the tape leader pin such that the first metal reinforcement member and the second reinforcement members embedded in the upper and lower cases *are respectively disposed at least over axially opposite flanges of the tape leader pin* when the tape leader pin is detachably held in the upright state between the upper and lower cases.

Neither Morita nor Tanaka, whether taken alone or in combination, teach or suggest at least the features of the first metal reinforcement member and the second reinforcement members embedded in the upper and lower cases are respectively disposed at least over axially opposite flanges of the tape leader pin when the tape leader pin is detachably held in the upright state between the upper and lower cases, as claimed. For instance, the Examiner concedes that Morita does not teach metal reinforcing members in a tape cartridge case. Further, Tanaka teaches a conventional cassette tape that has *side frame members* and *a rear frame member*, which are provided at locations *other than the opening of the cassette tape where exposure of the tape occurs*. Tanaka therefore does not suggest metal reinforcement members embedded in the case such that they are disposed *over the flanges* of the tape leader pin, as claimed.

Thus, Morita in view of Tanaka does not teach or suggest all the features of claim 4, nor has the Examiner provided any objective evidence to suggest modification of the metal reinforcing members in a conventional cassette tape to be disposed in the manner claimed.

Reconsideration and withdrawal of the rejection of claim 4 is therefore requested. With respect to claims 5-6 and 8, Applicant submits that these claims are allowable at least by virtue of their dependency and by virtue of the features recited therein.

### **New Claim**

In order to provide additional coverage merited by the scope of the present invention, Applicant is adding new claim 8. As noted above, Applicant submits that claim 8 is allowable at least by virtue of depending from claim 4 and by virtue of the features recited therein.



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**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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